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MUSCIDAE (DIPTERA) FROM GREECE,
COLLECTED BY E. JANSSENS AND R. TOLLET,
WITH DESCRIPTIONS OF FOUR NEW SPECIES,

by Leif LYNEBORG (Copenhagen).

The material on which the present paper is based was mostly collected in 1953 by Prof. E. JANSSENS and Mr R. TOLLET, but a few specimens originate from Prof. JANSSENS' expeditions to Greece in 1957, 1961 and 1962. A total of 49 species of *Muscidae* s. str. has been found in the collection. The material of *Anthomyiidae* is being studied by Mr D. M. ACKLAND, Oxford. Four species are described as new, and taxonomic remarks are given on others.

The author wishes to thank Prof. E. JANSSENS, who made it possible for him to examine this collection. Thanks are also due to Mr A. C. PONT, British Museum, who contributed valuable help by identifying some of the critical species, and to Mr E. A. FONSECA, Bristol, and Dr J. KUGLER, Tel-Aviv, for sending specimens for comparison.

The species are listed in accordance with HENNIG (1955-64).

Fannia monilis HALIDAY, 1838. Mont Pélion E., Zagora, 350 m, ♀, 1/5-VIII-1953, det. A. C. PONT.

Fannia scalaris FABRICIUS, 1794. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953, det. A. C. PONT.

Mydaea electa ZETTERSTEDT, 1860. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 2 ♀ ♀, 28/31-VII-1953, det. A. C. PONT.

Mydaea lateritia RONDANI, 1866. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 2 ♂ ♂, 28/31-VII-1953.

Hebecnema vespertina FALLÉN, 1823. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 2 ♀ ♀, 28/31-VII-1953.

Helina abdominalis ZETTERSTEDT, 1846. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 3 ♂♂, 28/31-VII-1953. Mont Parnasse N., Polydrosion, 350 m, ♀, 8/11-V-1957.

Helina beloloba n. sp. Holotype : Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 28/31-VII-1953. In Institut royal des Sciences naturelles de Belgique, Bruxelles. Paratypes : 7 ♂♂ and 4 ♀♀ with the same data as the holotype. Three paratypes (2 ♂♂ and ♀) in Zoological Museum, Copenhagen. The other paratypes in Institut royal des Sciences naturelles de Belgique, Bruxelles.

Description.

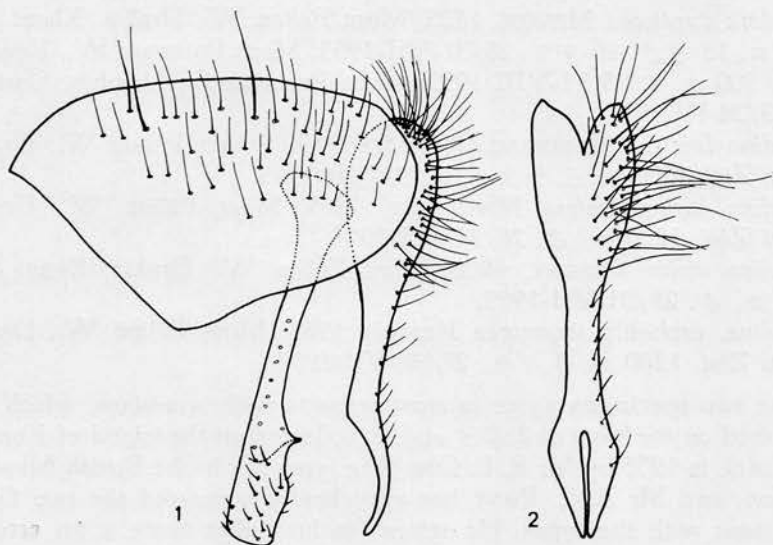
♂ : Head. The parafrontalia (orbits) are narrow and either touch or are separated by as much as the width of front ocellus. The ori setae reach halfway from lunula to front ocellus. Parafacialia (cheeks) as wide as third antennal joint. Genae (jowls) twice as wide as third antennal joint. Parafrontalia and parafacialia with whitish-grey dust, genae more blackish-grey. Third antennal joint three times as long as broad. Arista plumose, the longest hairs longer than width of third antennal joint. Antennae black. Palpi brownish-black. Proboscis black, with slightly greyish dust. Eyes bare.

Thorax. 2 + 3 dc setae, in three of the specimens (2 ♂♂ and 1 ♀) 4 dc setae on one side. acr setae in front of suture in four rows. pra seta short. No hairs near the hind n seta. 2 + 2 st setae. Prosternum and hypopleuron without hairs. Underside of scutellum without hairs. Thorax blackish, mesonotum and scutellum with yellowish-grey dust, pleura with greyish dust. Seen from behind, two narrow, dark stripes, which do not reach the middle, postsutural dc seta, are present. On hind part of mesonotum sometimes a trace of a brownish middle stripe. More laterally, two broader, dark stripes which are divided into two spots, one in front of suture, and one behind.

Abdomen covered by yellowish-grey dust. Third and fourth tergites with a pair of small, roundish, blackish-brown spots.

Genitalia. Paralobus and mesolobus are shown in lateral view in fig. 1. Mesolobus in caudal view is shown in fig. 2.

Legs. t_1 with a strong seta on hind part near middle; its length not more than one-third the length of t_1 . f_2 with 3-4 strong setae on underside of basal half. t_2 with 2 setae on posterior side. f_3 with a complete row of av setae, which are strongest near the tip; no pv setae. t_3 with 3-4 very long and some shorter ad setae. The two ad setae nearest the tip are the longest and finest; their length equals the length of metatarsus of p_3 . In addition, 2 av setae on t_3 . Femora mainly black. f_1 yellow only at tip, f_2 and f_3 yellowish on distal fourth to third. Tibiae yellow. Tarsi black.



Helina beloloba n. sp., ♂, paratype.

Greece, Mont Pélion W., Drakia, Khani Zisi, 1200 m, 28/31-VII-1953.

Fig. 1. Mesolobus and parolobus in lateral view; fig. 2. Mesolobus in caudal view.

Wings with a slightly yellowish-grey tinge. Costal spine as long as or a little longer than $r-m$. Node of r_{2+3} and r_{4+5} with some hairs on underside of the wing. $m-m$ curved, with slightly brownish shading. Halteres and squamae yellowish.

♀ : As normal in *Helina*, with broad frons. Spots only on third tergite. Legs paler than in male, f_1 more yellow at tip, and f_2 and f_3 completely yellow. Chaetotaxy of legs as in male, but t_1 with 1 ad seta, and t_3 with 3 normal ad setae.

Length. 6.5-7.5 mm.

This new species will be identified as *cilipes* SCHNABL & DZIEDZICKI (1911) after the key in HENNIG (1955-64, pp. 151-52). According to HENNIG the type specimen to *cilipes* is presumed lost, and he also (l.c., p. 168) mentions seeing only two male specimens from Luga in the Leningrad-region. The genitalia of *beloloba* (figs. 1-2) are clearly different from those of *cilipes*, which have been figured by both SCHNABL & DZIEDZICKI (l.c., figs. 445-46) and HENNIG (l.c., plate VIII, figs. 138 and 146).

As a full description of *cilipes* does not exist, it is difficult to give external characters by which the two species can be separated. However, the frontal stripe seems narrower in *beloloba* than in *cilipes*, and the seta on hind part of t_1 is shorter in *beloloba* than described for *cilipes*. The ad setae to t_3 may also be longer in *beloloba* than in *cilipes*, at least in regard to the specimen from Luga, which is figured by HENNIG (l.c., text-fig. 44 B).

Helina duplicata MEIGEN, 1826. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 13 ♂♂, 10 ♀♀, 28/31-VII-1953. Mont Parnasse W., Koukouvitza, 900 m, ♀, 8/11-VIII-1953. Mont Parnasse S., Delphes, Castalie, ♀, 23/24-IV-1957.

Helina laetifica ROBINEAU-DESVOIDY, 1830. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 9 ♀♀, 28/31-VII-1953.

Helina lasiophthalma MACQUART, 1835. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 28/31-VII-1953.

Helina vicina CZERNY, 1900. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 28/31-VII-1953.

Helina, probably *straminea* HENNIG, 1963. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 2 ♀♀, 28/31-VII-1953.

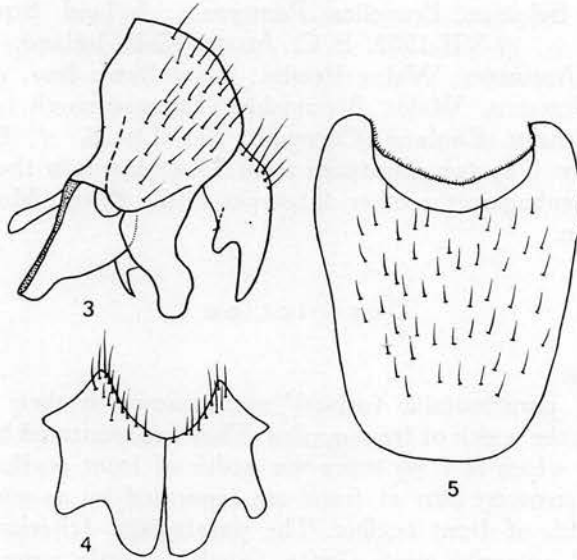
The two specimens agree in most respects with *straminea*, which was described on the basis of 2 ♂♂ and ♀ collected on the island of Korčula, Dalmatia, in 1955 by Mr R. L. COE. The types are in the British Museum, London, and Mr A. C. PONT has very kindly compared the two Greek specimens with the types. He states (in litt.) that there is an error in HENNIG's description, as the node of r_{2+3} and r_{4+5} is described as being without hairs on underside of the wing. In fact, both the type specimens and the two Greek specimens have 2-3 hairs here. According to Mr PONT the only real structural difference between the types and the Greek specimens lies in the length of pra seta. In the types this seta is only very slightly longer than the adjacent thoracic hairs, but in the Greek specimens it is considerably longer. The Greek specimens are also slightly darker in colour, and in this respect are more closely related to a female specimen from Jerusalem, which Hennig with some hesitation refers to *straminea*.

Spilogona funeralis RONDANI, 1866. Mont Olympe E., Stavros à Prioni, 1000 m, ♂, 21/23-VII-1953.

Limnophora (*L.*) *setinerva* SCHNABL & DZIEDZICKI, 1911. Mont Olympe E., Stavros à Prioni, 1000 m, ♂♀, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 6 ♂♂, 7 ♀♀, 28/31-VII-1953. Mont Pélion E., Zagora, 350 m, ♂, 1/5-VIII-1953.

The genus *Limnophora* R.-D. (s. str.) seems to contain considerably more species in Europe than those recorded by HENNIG in « Lindner ». In a study (LYNEBORG, 1965) of the *Limnophora*-species of Iceland the present author has described a new species and given taxonomic notes on others.

L. setinerva in the sense of HENNIG (l.c., p. 379) consists of at least two species. The first is the typical *setinerva* described by SCHNABL & DZIEDZICKI (l.c., p. 279) on the basis of two specimens, a male and a female, from Sassenage near Grenoble, France. The genitalia of the male type were figured (figs. 407, 408 and 858) by the authors. These genitalia are very characteristic, and exactly like those drawn (figs. 3-5) from a specimen of the above-mentioned series from Khani Zisi.



Limnophora setinerva SCHNABL & DZIEDZICKI, ♂,
Greece, Mont Pélion W., Drakia, Khani Zisi, 1200 m, 28/31-VII-1953.
Fig. 3. Hypopygium in lateral view; fig. 4. Mesolobus in caudal view; fig. 5. 5th sternite.

The second species mixed up in HENNIG's *setinerva* is the *L. exsurda* PAND. in the sense of COLLIN (1921, p. 245), and most probably, also of several other authors (see HENNIG, l.c., p. 379), though only close examination of these authors' material will solve the true identity. In the present paper, only the British « *exsurda* PAND. » has been taken into consideration. It is curious that HENNIG has regarded this species (the genitalia of which he figures (l.c., plate X, fig. 191, and plate XIV, fig. 278)) as conspecific with *setinerva*. These genitalia seem identical with those shown in figs. 6-8, and are quite unlike those of the typical *setinerva* (see above).

As mentioned by HENNIG, *exsurda* PANDELLÉ (1899, p. 126) is a species dubia, as there is no type specimen in PANDELLÉ's collection in Paris. Moreover, some details in PANDELLÉ's description, composed by the sections in his key numbered 1, 2', 11', 14, 15', 17', and 18, indicate that PANDELLÉ could hardly have had specimens of *exsurda* PAND. s. Coll. or *setinerva* SCHBL. & DZ. before him when describing his species. Consequently, the British *exsurda* PAND. s. Coll. (which also is represented in the Greek collection) requires a new name. It will be described in the following as :

Limnophora (L.) olympiae n. sp. Holotype : Mont Olympe E., Stavros à Prioni, 1000 m, ♂, 21/23-VII-1953. In Institut royal des Sciences

naturelles de Belgique, Bruxelles. Paratypes : Ireland, Stradbally, ♂, 23-VII-1908; ♀, 19-VII-1908, F. C. ADAMS Coll. Ireland, ♂, 27-VII-1908, H. W. ANDREWS. Wales, Pembs., Traethllywn Bay, ♂ ♀, 6-VII-1958, E. A. FONSECA. Wales, Breconshire, Llangammarch, ♂, 20-VIII-1913, J. E. COLLIN. England, Cornwall, The Lizard, ♂, 8-VIII-1896, J. W. YERBURY. The two paratypes from Traethllywn in the Zoological Museum, Copenhagen, the other paratypes in the British Museum (Nat. Hist.), London.

Description.

♂ : holotype.

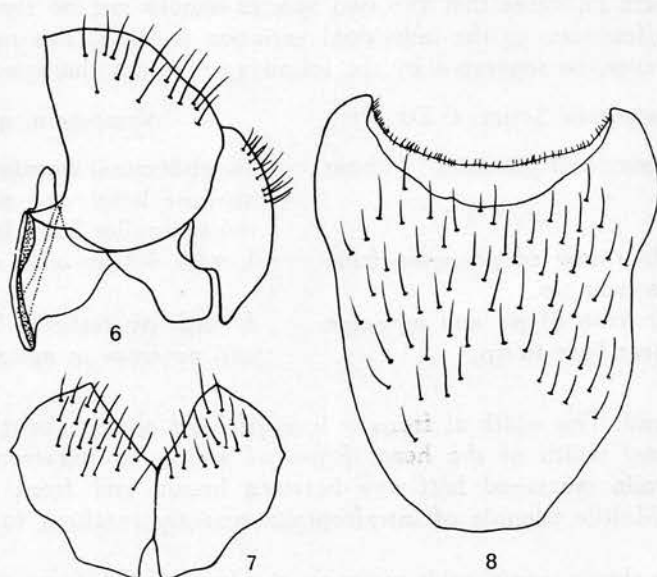
Head. The parafrontalia (orbits) are narrow; in their upper part narrower than the width of front ocellus. They are separated by a blackish interfrontalia, which is $1\frac{1}{2}$ times the width of front ocellus. Thus the eyes at the narrowest part of frons are separated by as much as three times the width of front ocellus. The parafacialia (cheeks) nearly as wide as third antennal joint. Genae (jowls) a little more than twice as wide as third antennal joint. In profile, the mouth-edge protrudes no more than frons. Seen from above, the parafrontalia and parafacialia are densely covered with whitish-grey dust; the interfrontalia is blackish, in sharp contrast to the parafrontalia. Genae and occiput with darker and more bluish-grey dust. Third antennal joint nearly twice as long as broad. Arista distinctly pubescent, but the longest hairs shorter than thickness of arista at base. Antennae and palpi black. Proboscis shiny, black. Eyes bare.

Thorax. 2 + 4 dc setae; acr setae strictly biserial in front of suture. Mesonotum with bluish-grey dust, pleura with more whitish-grey dust. In front of suture three brownish stripes, viz., a narrow middle stripe between the acr setae, and a lateral pair of stripes between the dc setae and the ph + prs setae. Behind the suture a brownish middle spot; this is broad in fore half, then suddenly narrows, and ends in a narrow stripe not reaching scutellum. Two lateral spots chaped like a horse-shoe. Scutellum uniformly brownish-black.

Abdomen mainly covered by whitish-grey to bluish-grey dust. Tergite 1 + 2 with small, semilunular, brownish spots. 3rd and 4th tergites with a pair of triangular, brownish spots. The spots do not reach the fore margin or side margin of the tergites, and are separated by a broad, greyish middle stripe. First abdominal sternite with a pair of long setulose hairs and some additional small hairs on lateral margin.

Genitalia. The hypopygium in lateral view is shown in fig. 6, the mesolobus in caudal view in fig. 7, and the 5th sternite in fig. 8.

Legs black. t_1 without setae. f_2 with a few rather short and weak pv setae near base. t_2 with 1 pd seta. f_3 with long and thin pv setae in basal half and about 5 long av setae in apical half. t_3 with 1 ad and 1 av setae.



Limnophora olympiae n. sp., ♂, holotype.
Greece, Mont Olympe E., Stavros à Prioni, 1000 m, 21/23-VII-1953.
Fig. 6. Hypopygium in lateral view; fig. 7. Mesolobus in caudal view; fig. 8. 5th sternite.

Wings slightly brownish. r_{4+5} and m_{1+2} parallel. As in *setinerva*, hairs are found on r_{4+5} at some distance from fork of r_{2+3} and r_{4+5} . Squamae whitish. Halteres yellowish.

Length. About 5 mm.

Variation. The five British male paratypes agree with the holotype in all structural characters except for two features: The interfrontalia is a little wider, i.e., twice as wide as front ocellus (the same as in *setinerva*), and t_2 has 1 or 2 pd setae (usually 2 pd in *setinerva*). On the other hand, there is considerable difference in coloration between the paratypes and the holotype. As a whole, the British specimens are of a darker coloration than the holotype. The paratype from Llangammarch is the only one in which the colour of mesonotum is as described for the holotype. The other four male paratypes have a darker mesonotum which can be described as follows: Middle stripe in front of suture exceeds the acr setae in two paratypes; lateral stripes in front of suture reach the dc setae in all four paratypes; behind suture the middle spot is more or less merged with the lateral, horseshoe-shaped spots in the same four paratypes. In addition all five paratypes have larger abdominal spots than the holotype. The spots of 3rd and 4th tergite reach fore margin of the tergites. These dark-coloured British specimens are very similar to the Greek males of *setinerva* with regard to coloration, while in this respect the holotype is clearly distinct from the Greek *setinerva*.

These facts indicates that the two species should not be separated by colour differences, as the individual variation is large. The two species can, however, be separated by the following external characters :

setinerva SCHBL. & Dz.

olympiae n. sp.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. 1st abdominal sternite without hairs. 2. f_2 with a row of pv setae from base to near tip. 3. f_3 with rows of pv and av setae from near base to tip. | <ol style="list-style-type: none"> 1st abdominal sternite with two setulose hairs, and some additional smaller hairs laterally. f_2 with 3-4 pv setae near base. f_3 with pv setae in basal half and av setae in apical half. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

♀ : Head. The width of frons at level of front ocellus about one-third of the total width of the head. Ratio of widths of parafrontalia and interfrontalia measured half-way between lunula and front ocellus is 1 : 3 : 1. Middle triangle of interfrontalia scarcely reaching fore margin of frons.

Thorax shows considerable variation in coloration. In the paratype from Traethllywn the middle stripe in front of suture is well separated from the lateral stripes, and scutellum has a broad, greyish, middle stripe. In the paratype from Stradbally the areas between the middle stripe and the lateral stripes are nearly as dark as the stripes themselves, and scutellum is only indistinctly greyish in middle part. acr setae biserial, as in the male.

Abdomen remarkably broad, i.e., only 1.1-1.2 times longer than maximal breadth. Tergite 1 + 2 with two rather small, brownish-black, middle spots at hind margin. 3rd and 4th tergites with two broad, band-shaped spots at hind margin, separated by a broad, greyish, middle stripe. The spots reach lateral margin and gradually increase in length towards the middle, where they occupy two-thirds of the total length of tergite. In the paratype from Stradbally there are narrow, dark stripes from the main spots to fore margin of tergite, bordering the greyish middle stripe. In the paratype from Traethllywn the main spots are not connected with the fore margin (and then with the spots of the preceding tergite). Pubescence of first abdominal sternite as in the male.

Legs. Ventral setae of f_2 weaker than in the male. f_3 without pv setae and with only 2-3 av setae at tip. Otherwise as in the male.

Length. 5.2-5.8 mm.

The female of *setinerva* SCHBL. & Dz. is very similar to the female of *olympiae*. The most useful character for separating them seems to be the absence or presence of hairs on the first abdominal sternite. The abdomen in *setinerva* is narrower than in *olympiae*, i.e., about 1.5 times longer than maximal breadth. As in *olympiae* there is considerable variation in coloration of thorax and abdomen. Chaetotaxy of legs as described for *olympiae*.

Limnophora (L.) obsignata RONDANI, 1866. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953.

Limnophora (Pseudolimnophora) triangula FALLÉN, 1825. Mont Olympe E., Stavros à Prioni, 1000 m, ♀, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953. Mont Pélion E., Zagora, 350 m, ♀, 1/5-VIII-1953.

Limnophora (Ps.) sp., near *pollinifrons* STEIN, 1916. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 28/31-VII-1953. The specimen agrees in most respects with *pollinifrons*, but there are a few differences. The acr hairs are strictly biserial, and the parafacialia seem narrower than described for *pollinifrons*. The genitalia are not identical with those figured by SCHNABL & DZIEDZICKI (l.c., figs. 401-402) of *albifrons* PAND. = *pacifica* SCHIN., which HENNIG (l.c., p. 395) synonymizes with *pollinifrons*. Owing to the bad condition, the present author has not attempted to further investigate the specific relationship of the specimen.

Lispe pygmaea FALLÉN, 1825. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 2 ♀ ♀, 28/31-VII-1953.

Lispe tentaculata DEGEER, 1776. N. E. Anatolie, Trébizonde, ♀, 13/14 et 23/26-VIII-1962.

Lispocephala brachialis RONDANI, 1877. Mont Olympe E., Stavros à Prioni, 1000 m, ♂, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 26 ♂ ♂, 28 ♀ ♀, 28/31-VII-1953.

Atherigona varia MEIGEN, 1826. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953. Mont Pélion E., Zagora, 350 m, ♂ ♀, 1/5-VIII-1953.

Schoenomyza litorella FALLÉN, 1823. Mont Olympe E., Stavros à Prioni, 1000 m, ♂ ♀, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 3 ♀ ♀, 28/31-VII-1953. Mont Pélion E., Zagora, 350 m, 2 ♂ ♂, ♀, 1/5-VIII-1953.

Allognota agromyzina FALLÉN, 1825. Mont Pélion E., Zagora, 350 m, ♂ ♀, 1/5-VIII-1953.

Coenosia atra MEIGEN, 1830. Mont Olympe E., Stavros à Prioni, 1000 m, ♀, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂, 5 ♀ ♀, 28/31-VII-1953.

Coenosia humilis MEIGEN, 1826. Mont Pélion E., Zagora, 350 m, 8 ♀ ♀, 1/5-VIII-1953.

Coenosia tigrina FABRICIUS, 1775. Argolide, Mycènes, ♀, 4/6-V-1957. Mont Parnasse N., Polydrosion, 350 m, ♂ ♀, 8/11-V-1957.

Coenosia tricolor ZETTERSTEDT, 1845. Mont Olympe E., Stavros à Prioni, 1000 m, 2 ♂ ♂, 21/23-VII-1953. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 178 ♂ ♂, 126 ♀ ♀, 28/31-VII-1953. Mont Pélion E., Zagora, 350 m, 12 ♂ ♂, 4 ♀ ♀, 1/5-VIII-1953. Mont Parnasse W., Koukouvitza, 900 m, ♂ ♀, 8/11-VIII-1953.

Alloeostylus simplex WIEDEMANN, 1817. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953.

Ophyra leucostoma WIEDEMANN, 1817. Mont Olympe E., Stavros à Prioni, 1000 m, 2 ♀♀, 21/23-VII-1953. Mont Pélion E., Zagora, 350 m. 3 ♀♀, 1/5-VIII-1953.

Hydrotaea borussica STEIN, 1899. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 2 ♀♀, 28/31-VII-1953.

Hydrotaea cyrtoneurina ZETTERSTEDT, 1845. Mont Pélion E., Zagora, 350 m, ♂, 1/5-VIII-1953.

Hydrotaea penicillata RONDANI, 1866. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 3 ♂♂, 2 ♀♀, 28/31-VII-1953.

Muscina assimilis FALLÉN, 1823. Mont Parnasse W., Koukouvitza, 900 m, ♂♀, 8/11-VIII-1953.

Phaonia mediterranea HENNIG, 1963. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♂♀, 28/31-VII-1953.

Phaonia pallida FABRICIUS, 1787. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 3 ♂♂, 2 ♀♀, 28/31-VII-1953.

Phaonia scutellata ZETTERSTEDT, 1845. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 7 ♂♂, 7 ♀♀, 28/31-VII-1953. Only the two male type specimens from Sweden (Östergötland) were known until 1963, when HENNIG (l.c., p. 864) recorded the species from Dalmatia and Greece. The above-mentioned series from Khani Zisi must also be referred to this species, which is very closely related to *signata* MEIGEN, 1826. This last species is familiar to the present author from many specimens taken in various Danish localities. In male *signata* the shortest distance between the eyes is about twice the width of front ocellus; the width of 10 facets at level of middle of frons is about 0.27 mm, and the parafacialia is relatively wide (0.23-0.27 mm). In six of the seven male specimens of *scutellata* the shortest distance between the eyes does not exceed the width of front ocellus; in the seventh specimen this is a little wider (ratio : 4 : 3). Regarding size of facets, the seven male specimens fall into two groups. In five specimens the width of 10 facets is 0.30-0.34 mm; in the two remaining specimens, 0.43 and 0.45 mm. The width of parafacialia also shows considerable variation. In six specimens it is between 0.15 and 0.20 mm, while it is 0.25 mm in the seventh specimen (the one with relatively wide frons). The colour of antennae and palpi varies considerably both in Danish *signata* and in the Greek *scutellata*. In the two specimens with large facets the two basal antennal joints are yellowish and the palpi are yellowish in basal part, as in most *signata*. In the other five specimens both structures are more or less blackish.

Phaonia variegata MEIGEN, 1826. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 7 ♂♂, 2 ♀♀, 28/31-VII-1953. It is a little difficult to state to which of the two closely related species : *variegata* and *populi* MEIGEN (1826), the above-mentioned series should be referred. In table 1 six characters are listed, by means of which HENNIG (l.c., p. 785) separates the males of *variegata* and *populi*. The distribution of these characters in the seven male specimens is shown in the table. It will be seen, that all seven specimens agree with *variegata* in three of the characters

(A, D and E). Six specimens have two characters (B and C) in common with *populi*, but it must be mentioned that as stated by HENNIG, *variegata* does not always possess character C. On the other hand, he states that in *variegata* hairs are never found on hypopleuron. The last character (F) is less reliable than the other five, and in this respect all specimens seem to most resemble *variegata*. The two female specimens both have 2 pairs of prs acr, t_1 with 1-2 setae and if setae, and will then be identified as *variegata*. In accordance with these facts, all nine specimens are taken for *variegata*.

Table 1.

	A	B	C	D	E	F
	Number of pairs of prs acr	Hypopleuron with or without hairs	Number of setae on t_1	Number of setae on t_2	Ratio of 3rd antennal joint	Colour of 2nd antennal joint
<i>Ph. populi</i> MEIG. ...	1	+	0	3	4	yellowish
Specimen No. 1 ...	2	+	0	2	3.3	blackish
Specimen No. 2 ...	2	+	0	2	3.0	brownish
Specimen No. 3 ...	2	+	0	2	3.7	blackish
Specimen No. 4 ...	2	+	0	2	3.7	—
Specimen No. 5 ...	2½	+	0	2	3.7	brownish
Specimen No. 6 ...	2	+	0	2	3.3	blackish
Specimen No. 7 ...	2	—	1	2	3.3	—
<i>Ph. variegata</i> MEIG.	2	—	(1)	2	3.5	—

Phaonia viarum ROBINEAU-DESVOIDY, 1830. Mont Pélion W., Drakia, Khani Zisi, 1200 m, ♀, 28/31-VII-1953.

Phaonia hellenia n. sp. Holotype : Mont Parnasse S., Delphes, Castalie, ♂, 23/24-IV-1957. In Institut royal des Sciences naturelles de Belgique, Bruxelles.

Description.

Head. Frons relatively broad, i.e. 1.5 times wider than maximal width of third antennal joint. Each of the parafrontalia about 1.5 times wider than width of front ocellus. Interfrontalia at its narrowest almost twice as wide as front ocellus (= two-thirds of width of third antennal joint).

The ori setae reach close to level of front ocellus. They gradually decrease in size, the uppermost pair being short and fine. pvt setae placed behind a line between the vti setae. Parafacialia as wide as third antennal joint. Genae three times the width of third antennal joint. Interfrontalia seen from above blackish, seen frontally, with whitish-grey dust. Parafrontalia and parafacialia seen from above whitish-grey, genae greyish-black. Third antennal joint $2 \frac{1}{4}$ times longer than wide. Arista plumose, the longest hairs about as long as width of third antennal joint. Antennae black. Palpi black. Eyes with long, pale pubescence.

Thorax. 2 + 4 dc setae, anterior to foremost dc setae 2 + 2 setae, which are about half as long as the normal dc setae. 4 pairs of presutural acr setae. pra seta stronger and longer than hind n seta. 1 + 2 st setae. Notopleuron, pteropleuron and prosternum without hairs. Hypopleuron with 1-2 hairs under metathoracic spiracle. Propleuron with 1-2 long hairs. Mesonotum seen from behind greyish, with four blackish stripes. The two lateral stripes interrupted at suture. All four stripes reach half-way between suture and scutellum. Scutellum greyish, with apical margin reddish.

Abdomen covered with light greyish dust, and with shifting spots. Seen from behind, a narrow, blackish middle stripe on all tergites.

Legs. t_1 without seta at middle. f_2 with long and fine pv setae in slightly more than basal half, in apical half, shorter setae; no av setae, though irregularly arranged and rather long hairs in basal part. t_2 with 2 setae on posterior side. f_3 with full rows of both av and pv setae. All setae are remarkably short, and those in basal fifth, weak and hair-like. t_3 with 1 av, 2 ad and 1 pd setae. Femora mainly black, f_1 only yellow at tip, f_2 yellow on ventral surface of apical half, f_3 yellow on whole ventral surface. Tibiae yellow. Tarsi mainly yellow, the apical joints more brownish.

Wings without costal spine and without hairs on node of r_{2+3} and r_{4+5} . r_{4+5} and m_{1+2} slightly diverging. m-m cross-vein slightly S-curved. Both cross-veins distinctly clouded. Squamae yellowish-white. Halteres yellow.

Length. 9.6 mm.

The species described above belongs to HENNIG's *exoleta-pratensis*-group, and seems to be most closely related to *asiatica* HENNIG (1963) which was described on basis of a single male specimen from Tadschikistan. This species differs from *hellenia* in the following essential characters :

1. Interfrontalia wider than third antennal joint.
2. Interfrontalia seen from above, greyish.
3. Third antennal joint trice as long as wide.
4. f_3 with pv setae only in basal half.
5. t_3 with 2-3 av setae.
6. Smaller species : 6,5 mm.

The present author was originally of the opinion that *hellenia* would probably represent the hitherto unknown (see below) male of *Phaonia tersa* VILLENEUVE (1936) which was described on the basis of a single female specimen from Akschehir, Anatolia. Mr A. C. PONT, Brit. Mus., who also examined the type to *hellenia* came to the same conclusion. On the other hand, there are so many differences in essential characters between the two specimens (which can not be due to sexual dimorphism), that it was found impossible to treat them as conspecific. The characters by which *tersa* differs from *hellenia* are as follows :

1. First and second antennal joints and palpi, yellowish.
2. 2 pairs of presutural acr setae.
3. Hypopleuron without hairs.
4. Pteropleuron with a single hair.
5. Squamae whitish.
6. t_3 with 3-4 av setae.
7. Smaller species : 7 mm.

HENNIG (l.c., p. 881) gives a full description of a male specimen from Israel which, with some hesitation, he thinks might be the male of *tersa*. Through the kindness of Dr J. KUGLER, Tel-Aviv, the present author has been able to examine this specimen. It was discovered that HENNIG overlooked the fact that the specimen has hairs on prosternum. Thus, it can not be conspecific with *tersa*, and must represent an unknown species, hereby named *kugleri* n. sp. HENNIG units all species with a hairy prosternum into the *tenuiseta*-group, comprising *decussata* STEIN, *paradecussata* HENNIG, *rufitarsis* STEIN, *subdecussata* HENNIG, *tenuirostris* STEIN, and *tenuiseta* POKORNY, all of which have a very broad frons and a short pubescent arista. It is evident that *kugleri* is not closely related to any of these species, as it has a narrow frons with almost touching parafrofrontalia and long hairs on arista (c.f. HENNIG's description). The full data of the holotype to *kugleri* are as follows : Israel, Germak, ♂, 22-V-1962, Coll. Kugler. It is deposited in the Tel-Aviv University, Tel-Aviv, Israel.

Orthellia caesarion MEIGEN, 1826. Mont Pélion W., Drakia, Khani Zisi, 1200 m, 3 ♀ ♀, 28/31-VII-1953.

Pyrellia cadaverina LINNÉ, 1758. Mont Pélion E., Zagora, 350 m, ♀, 1/5-VIII-1953. Mont Parnasse W., Koukouvitza, 900 m, ♂, 8/11-VIII-1953.

Dasyphora albofasciata MACQUART, 1840. Mont Olympe E., Stavros à Prioni, 1000 m, 3 ♀ ♀, 21/23-VII-1953.

Dasyphora pratorum MEIGEN, 1826. Delphes, 2 ♀ ♀, 12-VIII-1953. Hte Thessalie, Kastania, Mts du Pinde, ♂, 30-V/2-VI-1961.

Morellia simplex LOEW, 1857. Mont Pélion E., Zagora, 350 m, ♀, 1/5-VIII-1953.

Musca domestica LINNÉ, 1758. Mont Olympe E., Stavros à Prioni, 1000 m, ♂, 21/23-VII-1953. Mont Pélion E., Zagora, 350 m, ♀, 1/5-VIII-1953. Aulis, Khalkis, ♂ ♀, 15/21-V-1957.

Musca vitripennis MEIGEN, 1826. Mont Olympe E., Stavros à Prioni, 1000 m, ♀, 21/23-VII-1953.

Stomoxys calcitrans LINNÉ, 1758. Mont Pélion E., Zagora, 350 m, 2 ♂ ♂, 1/5-VIII-1953.

Siphona atripalpis BEZZI, 1895. Mont Pélion E., Zagora, 350 m, ♂, 1/5-VIII-1953.

RÉSUMÉ.

L'auteur étudie un lot de Diptères (*Muscidae*) récoltés en Grèce. Sur un total de 49 espèces de *Muscidae* s. str., trois sont décrites comme nouvelles : *Helina beloloba*, *Limnophora* s. str. *olympiae* et *Phaonia hellenia*. En outre, l'auteur signale une espèce de *Limnophora* (*Pseudolimnophora*) qu'il n'a pu se résoudre à instituer comme *n. sp.* à cause de l'état défectueux des exemplaires. Il y voit cependant une espèce distincte de *L. (Ps.) pollinifrons* STEIN avec laquelle l'insecte en question offre le plus de ressemblance. *Phaonia kugleri* n. sp. est créé pour le spécimen décrit d'Israël par HENNIG (1955-64, p. 881) sous le nom de ♂ *Phaonia tersa* VILLENEUVE 1936.

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